IN THE CLAIMS

Cancel Claims 1-56 of the original application.

57. (New) An automated data storage library, comprising:

storage shelves for storing portable data storage cartridges;

at least one robot accessor having a gripper, said robot accessor for gripping and transporting at least one selected said portable data storage cartridge with respect to said storage shelves; and

a transfer station for releasably, repeatably electrically coupling with respect to a substrate having a plurality of electrical contacts on a substantially flat facing surface thereof, said substrate mounted in said portable data storage cartridge capable of being engaged by a loader, comprising:

a matching circuitized flexible substrate having electrical contacts on a facing surface thereof, said electrical contacts arranged to match said portable cartridge electrical contacts when in a face-to-face relationship;

an elastomeric compression element having a plurality of protruding compression members positioned at a rear surface of said matching circuitized flexible substrate and said protruding compression members facing and in contact with said rear surface, individual said compression members registered with corresponding individual said electrical contacts;

a reference plate for supporting said elastomeric compression element; and

a loader for engaging said portable data storage cartridge as received from said robot accessor, registering said cartridge substrate electrical contacts in face-to-face relation with said matching circuitized flexible substrate electrical contacts, and exerting a force on said portable cartridge toward said facing surface of said matching circuitized flexible substrate to cause said portable cartridge substrate to compress said elastomeric compression element between said matching circuitized flexible substrate and said reference plate to create non-wiping contact between said electrical contacts of said portable cartridge substrate and said electrical contacts of said matching circuitized flexible substrate, thereby forming a releasable, repeatable electrical connection therebetween.

58. (New) The automated data storage library of Claim **57**, wherein said electrical contacts of said transfer station matching circuitized flexible substrate comprise pads containing gold.

59. (New) The automated data storage library of Claim **58**, wherein said transfer station matching circuitized flexible substrate comprises copper pads on which are plated a diffusion barrier, and Type II gold pads plated on said diffusion barrier.

60. (New) The automated data storage library of Claim **59**, wherein said transfer station gold pads are plated to a thickness greater than standard.

61. (New) The automated data storage library of Claim **57**, wherein said electrical contacts of said transfer station matching circuitized flexible substrate comprise pads containing palladium.

62. (New) The automated data storage library of Claim **57**, wherein said transfer station loader is arranged to provide said force on said portable cartridge toward said facing surface of said matching circuitized flexible substrate, as a force normal to said facing surface of said matching circuitized flexible substrate.

63. (New) The automated data storage library of Claim **62**, wherein said transfer station loader is arranged to provide said normal force in the amount of at least 30 grams per individual compression member.

64. (New) The automated data storage library of Claim **57**, wherein at least ones of said electrical contacts of said transfer station matching circuitized flexible substrate comprise elongated contacts, each registering with two adjacent said

individual compression members of said elastomeric compression element.

65. (New) The automated data storage library of Claim **57**, wherein said transfer station reference plate is substantially flat, providing substantially uniform support of said elastomeric compression element.

66. (New) The automated data storage library of Claim **57**, wherein said transfer station additionally comprises alignment pins in close proximity to said elastomeric compression element, said alignment pins aligned substantially normal to said facing surface of said matching circuitized flexible substrate for mating with corresponding alignment holes of said portable cartridge to laterally align said portable cartridge substrate and said matching circuitized flexible substrate.

67. (New) The automated data storage library of Claim **66**, wherein said transfer station alignment pins are tapered to a rounded point in the direction of said portable cartridge substrate to orient said portable cartridge substrate and gradually laterally align said portable cartridge substrate and said matching circuitized flexible substrate.

68. (New) The automated data storage library of Claim **66**, wherein said transfer station alignment pins extend beyond said matching circuitized flexible substrate a distance sufficient to contact a cartridge failing to have said alignment holes, to protect said matching circuitized flexible substrate from contact with said cartridge.

69. (New) The automated data storage library of Claim **66**, wherein said transfer station alignment pins are conductive and coupled to ground to discharge any electrostatic charge at said corresponding alignment holes of said portable cartridge.

70. (New) The automated data storage library of Claim **57**, wherein said transfer station facing surface of said matching circuitized flexible substrate is oriented parallel to gravity, and said transfer station loader is oriented to provide said force orthogonal to gravity, to minimize debris deposition on said facing surface.

71. (New) The automated data storage library of Claim **57**, wherein said transfer station matching circuitized flexible substrate comprises a termination of a flex cable.

72. (New) The automated data storage library of Claim **71**, wherein said transfer station flex cable issues from said elastomeric compression element without an immediate change in direction, and subsequently forming a gradual curve in said normal direction to maintain symmetrical force on said matching circuitized flexible substrate as said elastomeric compression element is compressed.

73. (New) The automated data storage library of Claim **57**, wherein said electrical contacts of said transfer station matching circuitized flexible substrate are substantially flat.

74. (New) The automated data storage library of Claim **57**, wherein said electrical contacts of said transfer station matching circuitized flexible substrate comprise shaped contacts.

75. (New) The automated data storage library of Claim **57**, wherein said transfer station loader comprises at least one bell crank which rotates to an over-center position, thereby exerting said force on said portable cartridge.